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| Application/Control No. | Applicant(s)/Patent under Reexamination | ər |
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| 10/031,409              | MARUO ET AL.                            |    |
| Examiner                | Art Unit                                |    |
| Humera N. Sheikh        | 1615                                    |    |

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| 1   |  | <u> </u> | rs.      |                 |          |  |               |          |                 |          |   |             | <u> </u> |  |          |          |   |           |               |                   |     | E    |                 |                       |          |               |          |                 |           |          |           |
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| \$\frac{1}{3}   |  | •        | 1        |                 |          |  |               |          |                 | Ш        |   | <u></u>     |          | $\sqcup$   |          |          |   |           |               | $\bot$            |     |      |                 |                       |          |               |          |                 |           |          |           |
| \$\frac{1}{4}   \qu   | $\vdash$   | -        |          | <u> </u>        |          |  |               |          |                 | Щ        |   |             |          | <del>                                     </del> | _        |          |   | _         |               | 4-4               |     |      |                 |                       |          |               |          |                 |           |          |           |
| 5   | $\vdash$   | _        | ļ.,      |                 |          |  |               |          |                 | Щ        |   | <u></u>     |          |  | -        | +        | $\perp$   |           |               | 44                |     |      |                 | $ \!\!\!\!-\!\!\!\! $ |          |               |          | _               |           |          |           |
| 66   V  | $\vdash$   |          | -        | Ш               |          |  |               |          |                 |          |   |             |          | -  |          | -        | igwdown   | _         |               |                   |     |      |                 |                       |          |               |          |                 |           |          | _         |
| 107   |  |          | -        |                 |          |  |               |          |                 |          |   | ļ           |          |  |          |          | -   | -         | _             | +                 |     |      | _               | Н                     | _        | _             |          |                 | _         |          |           |
| S   |  |          | -        | $\vdash$        | _        |  | _             | _        |                 |          |   |             |          | ╀  |          | +        | $\vdash$  |           |               | 4-4               |     |      |                 | $\vdash$              |          |               | $\dashv$ |                 | $\dashv$  |          | -         |
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| 10  | <del> </del>                                     | _        |          | Н               |          |  | -             |          |                 |          |   |             |          | H  |          | $\dashv$ | -   | -         |               | +                 |     |      |                 |                       |          |               | -        |                 | $\dashv$  | _        |           |
| 111.  | <del>                                     </del> |          |          |                 |          | $\vdash$   | $\dashv$      |          |                 | $\vdash$ |   |             |          |  | -        |          | ╢   | -         |               | ┼╌┤               |     |      | ├               | $\vdash$              | -        |               |          |                 | $\dashv$  |          | ႕         |
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| 14  | <del></del>                                      |          | -        | $\vdash$        |          | <del>                                     </del> | -             |          | $\vdash$        | H        |   | $\vdash$    |          |  | +        | +-       | $\vdash$  | $\dashv$  | $\dashv$      | +                 |     |      |                 | ┝┼                    | $\dashv$ |               |          |                 |           | -        | $\dashv$  |
| 15  |  |          |          | $\vdash$        |          | $\vdash$   | -             |          | <del>-  </del>  | $\vdash$ | _ | -           |          |  | $\dashv$ | +-       | $\vdash$  | $\dashv$  | _             | +                 |     |      |                 | $\vdash$              |          |               | -        | -               | $\dashv$  | -        | ᅱ         |
| 16  |  |          |          |                 |          | $\vdash$   |               |          |                 | $\vdash$ |   |             |          | $\Box$   | _        | +        | Н   | $\dashv$  | +             | +                 |     |      |                 |                       |          |               | $\dashv$ |                 | $\dashv$  |          |           |
| 17  |  |          |          |                 |          | $\vdash$   |               | $\neg$   | $\dashv$        | Н        |   |             |          | T  | +        | +        | $\Box$  | +         | $\top$        | +                 |     |      |                 |                       |          |               | $\dashv$ |                 | $\dashv$  |          | $\dashv$  |
| 18  | -  |          |          | П               |          | H  | $\rightarrow$ |          |                 | Н        |   |             |          | $\sqcap$   |          | $\dashv$ | $\sqcap$  | _         |               | $\forall$         |     |      |                 |                       | $\dashv$ | $\overline{}$ | $\dashv$ | ┤┤              | +         |          | $\dashv$  |
| 19  |  | 18       |          |                 |          | П  | $\dashv$      |          |                 |          |   |             |          |  |          | 1        | $\Box$  | _         | $\top$        | 1                 |     |      |                 |                       |          | $\neg$        |          |                 |           |          |           |
| 120   |  |          |          |                 |          | П  |               |          |                 |          |   |             |          | П  |          |          | 1   | $\top$    | $\neg$        | 1                 |     |      |                 |                       |          |               |          |                 | $\dashv$  |          |           |
| 21       1       71       1       121       121       122       122       123       123       123       123       123       123       123       123       123       123       123       123       124       124       124       124       124       124       124       124       124       124       124       124       124       125       125       126       126       126       127       127       127       127       127       127       127       127       127       127       127       128       128       128       128       128       129       129       129       129       129       129       129       129       129       130       130       131       133 <td></td> <td><math>\top</math></td> <td><math>\top</math></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><math>\dashv</math></td> <td></td> <td><math>\exists</math></td>  |  |          |          |                 |          |  |               |          |                 |          |   |             |          |  |          |          |   |           | $\top$        | $\top$            |     |      |                 |                       |          |               |          |                 | $\dashv$  |          | $\exists$ |
| 122         123         122         123         123         123         123         123         123         124         124         125         125         125         126         126         126         126         126         126         126         127         127         127         127         127         127         127         127         128         128         128         128         128         129 <td></td> <td></td> <td>,</td> <td></td> <td></td> <td>П</td> <td></td> <td><math>\exists</math></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>H</td> <td></td> <td></td> <td></td> <td></td> <td><math>\neg</math></td> <td></td> <td></td> |  |          | ,        |                 |          | П  |               |          |                 |          |   |             |          |  |          |          |   | $\exists$ |               |                   |     |      |                 | H                     |          |               |          |                 | $\neg$    |          |           |
| 24         124         124         124         124         125         125         125         126         126         126         126         127         127         127         127         127         127         127         127         127         127         127         128         128         128         128         128         128         128         129         129         129         129         129         129         130         130         130         130         131         130         131         131         131         132         132         132         132         132         132         132         133         133         133         133         133         133         133         133         133         133         133         133         133         133         134  |  | 22       | -        |                 |          |  |               |          |                 |          |   |             | 72       | П  | İ        | 1        | $\Box$  |           |               |                   | i   |      |                 |                       |          | $\Box$        |          |                 | $\neg$    |          |           |
| 25         125         125         125         126         126         126         126         126         127         127         127         127         127         127         128         129         128         129         128         129         129         130         131  |  | 23       |          |                 |          |  |               |          |                 |          |   |             | 73       | $\Box$   |          | 1        |   |           |               |                   |     |      |                 |                       |          |               |          |                 |           |          |           |
| 26       126       126       126       127         27       128       78       128       128       128       129       129       129       129       129       129       129       129       129       129       129       130       131       133<   |  | 24       | •        |                 |          |  |               |          |                 |          |   |             | 74       |  |          |          |   | $\sqcap$  |               |                   |     | 124  |                 |                       |          |               |          |                 |           |          |           |
| 27       127       127       128       128       128       128       128       128       128       129       129       129       129       129       130       130       131       131       131       131       131       131       131       131       132       133       13   |  |          |          |                 |          |  |               |          |                 |          |   |             | 75       |  |          |          |   |           |               |                   |     | 125  |                 | П                     |          | $\neg$        |          |                 |           |          |           |
| 28         78         128         129         129         129         130         130         131         131         131         131         131         131         132         132         132         132         133         133         133         133         133         133         133         133         133         133         133         134         134         134         134         134         134         134         135         135         136         136         136         136         136         137         137         137         137         138         138         138         138         138         139         139         144         1   |  |          |          |                 |          |  |               |          |                 |          |   |             |          |  |          |          |   |           |               |                   |     | 126  |                 |                       |          |               |          |                 |           |          |           |
| 29       129       129       129       130       130       130       130       130       130       131       131       131       131       131       131       131       131       132       132       133       133       133       133       134       133       133       133       133       133       134       133       133       134       133       134       134       135       135       136       136       136       136       136       137       137       137       137       138       138       139       139       139       139       139       140       141       141       141       141       142       142       142       143       144       144       144       144       144       144       144       144       144       145       145       145       145       146       147       148       14   |  |          |          |                 |          |  |               |          |                 |          |   |             | 77       |  |          |          |   |           |               |                   |     |      |                 |                       |          |               |          |                 |           |          |           |
| 30  |  |          |          |                 |          |  |               |          |                 |          |   |             |          | <u> </u>   |          |          |   |           |               |                   |     |      |                 |                       |          |               |          |                 |           |          |           |
| 31       32       33       34       35       35       36       37       38       37       38       39 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td>Ш</td><td></td><td></td><td><math>oxed{oxed}</math></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>   |  |          |          |                 |          |  |               |          |                 |          |   |             |          | Ш  |          |          | $oxed{oxed}$  |           |               |                   |     |      |                 |                       |          |               |          |                 |           |          |           |
| 32       33       34       35       36       36       37       36       37       38       39 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>Ц</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>╽.</td><td></td><td></td><td></td><td>oxdot</td><td></td><td></td><td></td><td></td><td> </td><td></td><td></td><td></td><td><math> \bot  </math></td><td><math>\Box</math></td><td></td></td<>  |  |          |          |                 |          | Ц  |               |          |                 |          |   |             |          |  |          | ╽.       |   |           |               | oxdot             |     |      |                 |                       |          |               |          |                 | $ \bot  $ | $\Box$   |           |
| 33         133         134         134         134         134         134         134         134         134         134         135         135         135         136         136         137         137         137         137         137         138         138         138         138         139         139         139         139         139         140         140         140         141         141         141         142         142         142         143         144         144         144         144         145         146         147         147         148  |  |          |          |                 |          |  | _             |          |                 |          |   |             |          | Ш  |          |          |   | _         |               | $\bot$            |     |      |                 | Ш                     |          |               |          |                 | _         |          | _         |
| 34       35       36       37       38       37       38       37       38       39 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>_ _</td><td><math>\sqcup</math></td><td>4</td><td></td><td>-</td><td></td><td></td><td></td><td></td><td>_</td><td>_ </td><td></td><td></td><td>_</td><td></td><td>_</td></td<>   |  |          |          |                 |          |  |               |          |                 |          |   |             |          |  |          | _ _      | $\sqcup$  | 4         |               | -                 |     |      |                 |                       | _        | _             |          |                 | _         |          | _         |
| 35  |  |          |          |                 |          | $\dashv$   |               |          |                 |          |   |             |          | $\vdash \vdash$                                  | +        | _        | $\left  - \right $  | $\perp$   | +             |                   |     |      | H               | $\vdash \vdash$       |          |               |          |                 | _         | _        |           |
| 36       37       38       37       38       39       38       39 <td< td=""><td></td><td></td><td>•</td><td></td><td></td><td>  </td><td>  </td><td></td><td><math>\vdash \vdash</math></td><td></td><td>_</td><td></td><td></td><td></td><td><math>\dashv</math></td><td>-</td><td>-</td><td><math>\dashv</math></td><td>+</td><td>+</td><td></td><td></td><td><math>\vdash \vdash</math></td><td>  </td><td>_</td><td>_ </td><td> </td><td><math>\sqcup</math></td><td>_</td><td>_</td><td>_</td></td<>  |  |          | •        |                 |          |  |               |          | $\vdash \vdash$ |          | _ |             |          |  | $\dashv$ | -        | -   | $\dashv$  | +             | +                 |     |      | $\vdash \vdash$ |                       | _        | _             |          | $\sqcup$        | _         | _        | _         |
| 37       38       39 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td><math>\dashv</math></td><td></td><td></td><td>-</td><td></td><td><u> </u></td><td></td><td><math>\vdash</math></td><td><math>\dashv</math></td><td>- -</td><td><math>\vdash</math></td><td>+</td><td>-</td><td>+</td><td></td><td></td><td>_</td><td><math>\vdash \vdash</math></td><td> </td><td> </td><td> </td><td><math>\dashv</math></td><td>_</td><td>_</td><td>_</td></td<>   |  |          |          |                 |          |  | $\dashv$      |          |                 | -        |   | <u> </u>    |          | $\vdash$   | $\dashv$ | - -      | $\vdash$  | +         | -             | +                 |     |      | _               | $\vdash \vdash$       |          |               |          | $\dashv$        | _         | _        | _         |
| 38  |  |          |          |                 |          |  | $\dashv$      |          |                 |          | • | <u> </u>    |          | -  |          | -        | $\vdash$  | -         |               | ┼┤                |     |      |                 | $\dashv$              |          |               | _        |                 |           | _        | _         |
| 39  |  |          | -        | $\dashv$        | -        | $\vdash \vdash$                                  | $\dashv$      | -        | -               |          |   |             |          | $\vdash \vdash$                                  | +        | -        | +   | +         |               | ┼╌┤               |     |      |                 | -                     |          |               |          | $\dashv$        | -         | _        | $\dashv$  |
| 40       90       140       140       140       141       141       141       141       141       141       141       141       141       141       141       141       142       142       142       142       142       143       143       143       144       144       144       144       144       144       144       144       144       144       145       145       145       146       146       147       147       147       147       148   |  |          | $\dashv$ | $\vdash \vdash$ |          | $\vdash \vdash$                                  | $\dashv$      |          | $\dashv$        |          |   | <u> </u>    |          | $\vdash$   | +        | +        | $\vdash$  | +         | +-            | ╁┤                |     |      | <u> </u>        | $\vdash \vdash$       | $\dashv$ |               | _        |                 |           |          |           |
| 41       91       141       141       141       142       142       142       142       142       143       143       143       143       144       144       144       144       144       144       144       145       145       145       146       146       146       147       147       147       148   |  |          |          | $\dashv$        | _        |  | $\dashv$      |          | $\vdash$        |          |   | <b> </b>    |          | ╂╼╌╂   | +        | -}-      |   | $\dashv$  | $\dashv$      | ╁┈┤               |     |      | <u> </u>        |                       |          |               |          |                 | -+        | $\dashv$ | $\dashv$  |
| 42       92       142       142       143       143       143       143       143       143       144       144       144       144       144       144       144       144       144       144       144       145       145       145       145       145       146       146       147       147       147       147       148   |  |          |          | $\vdash$        | $\dashv$ | $\vdash$   | $\dashv$      |          | $\vdash$        |          |   |             |          | $\vdash$   | +        | +        | ╁╌┤   | +         |               | +                 |     |      | $\vdash \vdash$ | $\vdash \vdash$       | $\dashv$ | -             |          |                 | $\dashv$  | _        | $\dashv$  |
| 43       93       143         44       94       144         45       95       145         46       96       146         47       97       147         48       98       148   |  |          |          |                 |          | $\dashv$   | ᆉ             | ᅱ        | $\dashv$        | $\dashv$ |   | <del></del> |          |  | $\dashv$ |          | ┼┤  | $\dashv$  | +             | ╁╌┤               |     |      |                 | -                     | -+       | $\dashv$      |          |                 | ᆉ         | $\dashv$ | $\dashv$  |
| 44       94       144       144         45       95       145       145         46       96       146       146         47       97       147       147         48       98       148       148   |  |          | $\dashv$ |                 | $\neg$   |  |               |          |                 | $\vdash$ | _ |             |          |  |          | +        | ╁╌┤   | $\dashv$  |               | +                 |     |      |                 | $\vdash \vdash$       |          |               | $\dashv$ |                 | $\dashv$  |          | $\dashv$  |
| 45     95       46     96       47     97       48     98   |  |          |          |                 | $\neg$   | 1  | $\dashv$      | $\dashv$ | $\dashv$        | -        |   |             |          |  | -        | +        | H   | $\dashv$  | +             | +                 |     |      | -               | $\dashv$              | -        |               | $\dashv$ | $\dashv$        | $\dashv$  | $\dashv$ | $\dashv$  |
| 46     96       47     97       48     98   |  | 45       |          |                 |          |  | $\dashv$      | -        |                 | -        |   |             |          |  |          | +        | ╁╌┨   | $\dashv$  | $\dashv$      | †=-               |     | 145  |                 | -                     | ᆉ        | $\dashv$      |          | $\dashv$        | $\dashv$  | +        | $\dashv$  |
| 47     97       48     98   |  |          |          | $\neg$          |          | -  | 1             |          | 一               |          |   |             |          | $\vdash$   | _ -      | $\top$   | $\vdash$  | $\dashv$  | $\dashv$      | ╁┤                |     |      |                 |                       |          | +             |          |                 | $\dashv$  | -        | $\dashv$  |
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|   |  |          | T        | ı               |          |  | 7             | $\neg$   | 一               |          |   |             |          |  | $\top$   | $\top$   | $\Box$  | $\dashv$  |               | +-                |     |      |                 |                       | $\dashv$ |               | $\dashv$ | $\dashv$        | $\dashv$  | $\dashv$ | $\dashv$  |
|   |  | 49       |          |                 |          |  | $\neg$        | $\neg$   |                 |          |   |             | 99       |  | 1        | 1        | $\sqcap$  | $\neg$    | $\neg \vdash$ | 1                 |     | 149  | М               | $\dashv$              |          | _             | -1       | _               | 十         | 7        | $\dashv$  |
| 50 100 150 150  |  |          |          |                 |          |  |               |          |                 |          |   |             |          |  | $\top$   | $\top$   | $\Box$  | $\neg$    | $\top$        | 17                |     |      |                 | $\Box$                | $\neg$   |               | $\dashv$ |                 | 寸         |          | $\dashv$  |